

Title (en)  
RADIO COMMUNICATION TERMINAL AND INTERFERENCE CANCELING METHOD

Title (de)  
ENDGERÄT ZUR NACHRICHTENÜBERTRAGUNG UND VERFAHREN ZUR UNTERDRÜCKUNG VON INTERFERENZ

Title (fr)  
TERMINAL DE RADIO COMMUNICATION ET PROCEDE DE SUPPRESSION DE L'INTERFERENCE

Publication  
**EP 1233559 A4 20051228 (EN)**

Application  
**EP 01963421 A 20010905**

Priority  
• JP 0107676 W 20010905  
• JP 2000269984 A 20000906

Abstract (en)  
[origin: EP1233559A1] In a radio communication terminal apparatus or an interference cancellation method a known signal is adopted as a common midamble, transmitting selection diversity which applied in a CDMA radio communication system in which a BS carries out communications with a MS provided with MUD, and interference from other users and fading influences are mitigated. The signal transmitted from base station apparatus 101 which is provided with a plurality of antenna branches and performs transmitting selection diversity is received, in symbol power calculating section 150, the symbol power of all codes excluding the code assigned to the radio-communication terminal apparatus is calculated for every antenna branch, in code number detecting section 208, interference code number is detected for every antenna branch based on a known signal included in the receiving signal, in interference code selecting section 209, interference code corresponding to the detected interference code number is selected for every antenna branch based on the calculated symbol power, and interference caused by the selected interference code is cancelled by interference cancellation processing in MUD 210. <IMAGE>

IPC 1-7  
**H04J 13/04**; H04B 7/08; H04B 7/26

IPC 8 full level  
**H04J 13/00** (2011.01); **H04B 1/7107** (2011.01); **H04B 7/02** (2006.01); **H04B 7/06** (2006.01); **H04B 7/26** (2006.01); **H04W 16/28** (2009.01); **H04W 28/18** (2009.01)

CPC (source: EP US)  
**H04B 1/7103** (2013.01 - EP US); **H04B 1/7107** (2013.01 - EP US); **H04B 7/06** (2013.01 - EP US); **H04B 7/0602** (2013.01 - EP US)

Citation (search report)  
• [A] RYUJI KOHNO ET AL: "COMBINATION OF AN ADAPTIVE ARRAY ANTENNA AND A CANCELLER OF INTERFERENCE FOR DIRECT-SEQUENCE SPREAD-SPECTRUM MULTIPLE-ACCESS SYSTEM", IEEE JOURNAL ON SELECTED AREAS IN COMMUNICATIONS, IEEE INC. NEW YORK, US, vol. 8, no. 4, 1 May 1990 (1990-05-01), pages 675 - 682, XP000204653, ISSN: 0733-8716  
• See references of WO 0221745A1

Designated contracting state (EPC)  
AT BE CH DE FR GB LI

DOCDB simple family (publication)  
**EP 1233559 A1 20020821**; **EP 1233559 A4 20051228**; AU 8442301 A 20020322; CN 1167221 C 20040915; CN 1389040 A 20030101; JP 2002084214 A 20020322; JP 3672808 B2 20050720; US 2002163896 A1 20021107; WO 0221745 A1 20020314

DOCDB simple family (application)  
**EP 01963421 A 20010905**; AU 8442301 A 20010905; CN 01802654 A 20010905; JP 0107676 W 20010905; JP 2000269984 A 20000906; US 11199702 A 20020430